

THE HYACINTH,

BY

R. MCINTOSH.

CARNATIONS & PICOTEEES,

BY

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THE HYACINTH.

BY R. MCINTOSH.

In mythology Hyacinthus was a beautiful boy, from whose blood, after being killed, sprang the hyacinth. Be that as it may, a flower garden in spring or a greenhouse without this plant looks very miserable and forlorn. For purity of colour, form, and fragrance the hyacinth can lay claim to being the king of spring flowering bulbs. Not only so, but its massive though peculiar style of beauty makes it a striking object when associated with other plants either in the flower garden or the greenhouse.

It seems a pity that we have to depend on our foreign neighbours, year after year, for these bulbs which we annually buy for our gardens. We can grow narcissi, crocuses, and snowdrops quite equal to and often better than those we buy from abroad, and I am sure that in some parts of the British Isles hyacinths can be grown equally as well. Holland at the present time is the nursery and home of the hyacinth. In spring, for many miles round Haarlem, the sense of smell and the eye are delighted by acres upon acres of these flowers.

The propagation of the hyacinth in Holland

is by the crossing or the hollowing system. The nurseries where these bulbs are extensively grown lie among low sandhills. During the winter those places where the hyacinths are to be planted the next autumn are trenched three feet deep in order to get fresh soil on the surface. In March and April the soil is enriched with some good manure—you know what I mean; not long strawy stuff, but manure that you can cut out with a spade as though it was pound cake. Manure from a stable and from a cow-house thrown into a heap and allowed to remain for twelve months before being used is the manure to use for hyacinths when the soil is of a light sandy character. If, on the other hand, the soil is stiff and heavy, means must be taken to make it lighter; so horse droppings, leaf mould, and sand must be the order of the day. It is quite simple if you look at it rightly—viz., if the natural soil is too light and poor, you must bring it into the right state by solid manure; if, on the other hand, it is too heavy, you must take means to bring it to the proper state by adding something to it that will make it lighter and more porous.

About the end of August growers begin to plant the bulbs in beds about four feet wide, the depth varying according to the age of the hyacinth and to the nature of the ground, also to the height the soil lies above the level of the water. I am indebted to "Case's Botanica

Index" for the last few lines, also the system of propagation followed. There is a great deal to be learned from the above, for how often do you see gardeners and amateur gardeners planting bulbs, no matter what size or how old they may be, at one uniform level; then they wonder how or why it is that some of the bulbs bloom whereas others have the greatest difficulty in pushing a leaf through the soil. Plant these bulbs, and, in fact, all bulbs, according to their age and character, then you need not fear failure. About the second week in April the hyacinths are in full bloom. This is the time that has made the environs of Haarlem so world-wide famous.

When their flowers begin to fade they are carefully cut off, for it is useless to exhaust the bulb by its pumping up sap into a long strong flower stem after the latter has done its work. About the end of June the bulbs are taken up, some of the oldest being cut into six equal parts through the base, and about half their depth. Next year the old bulbs will have decayed, but from the cut parts and amongst their shells from fifteen to twenty young bulbs will be found. These small bulbs have to be grown for four years until they are large enough to sell, or to be again cut to make more stock. This is the crossing system, the following being the hollowing system: During July, when the weather is dry and hot, the bottom of the bulb is cut off; there is then nothing left but the shells. The wounded bulbs

are then put into the sunshine to dry. In a few weeks' time a great quantity of white knobs will make their appearance on the cut part. These must be taken care of and planted in the autumn; all these small knobs will grow into bulbs, eventually reaching a marketable size.

HYACINTHS IN WATER.

There are great numbers of people in all towns who grow a few hyacinths in glasses. Sometimes they succeed in growing them in a creditable manner, but how seldom this is the case may be proved any season by taking a quiet stroll through those localities where these plants are to be seen. Notwithstanding repeated failures, the ladies who grow them quietly persevere again and again rather than acknowledge themselves to be beaten. These few hints I hope will enable them to avoid failures in the future, or at least to make them so rare as to be the exception and not the rule. To have these hyacinths in bloom for any length of time, some of the early, medium, and late kinds must be used. The form or colour of the glasses used does not affect their growth, for I have seen all kinds of shapes and colours used with satisfactory results; nor is glass absolutely necessary, for the best-bloomed lot I ever saw were grown in empty blacking-bottles. We must not forget, though, that watching their roots extending into the water is their greatest charm to a great many growers, so that, whatever the

colour chosen may be, preference should be given to those which allow of the roots being seen easily and distinctly. The glasses should be filled with clean soft water, with a small piece of charcoal put into it to keep it sweet. When this is done, place the bulbs on the top with the water near, but not quite touching their base. A cupboard is a capital place in which to place them until they are forward enough to put into their permanent positions.

This is the particular stage of their growth at which the bulbs are usually ruined, for they are brought forth into public life before they have finished their preparatory training; in other words, they should be exposed to the light gradually, and not before their roots have made a good growth. This, no doubt, seems a very trivial matter, yet it is frequently on this rock that the hopes of the grower are wrecked.

Supposing the above conditions to have been faithfully carried out, success will by no means be assured if worthless bulbs are bought, for bulbs that will flower fairly well if grown in pots or planted outside will often turn out a complete failure when grown in glasses. Rather than run this risk it is far better to go to a respectable nurseryman, pay him a fair price, and tell him for what purpose you require them, than to buy a lot of rubbish simply because they are cheap; then, after your care and trouble, to find you are doomed to disappointment.

Hyacinths in pots, when well grown, are simply charming. They are so beautiful that it is almost impossible to think of a greenhouse not honoured by their presence during the spring months.

There are all kinds of fantastical soils used and recommended to be used when hyacinths are grown in pots. If I can get good rotted turf from the top spit of a grass field, some sharp river sand, and good oak-leaf mould, I am content, for I well know that with occasional watering of liquid manure this compost will grow them to perfection. Pots from four to four and a-half inches are plenty large enough—one bulb to a pot. Of course, when two or more bulbs are to be grown in a pot, proportionately larger pots must be used. If the pots are new, steep them in water for a short time before being used, and if they are old pots, see that they are thoroughly clean inside and out. Thoroughly drain them by placing a piece of potsherd, hollow side down, over the hole in the bottom of the pot, and on this arrange other pieces in the same manner, finishing off with some finely-broken potsherds. A thin layer of dried moss should be placed over the drainage to prevent the soil from getting amongst the drainage, thus stopping it up. Remember this—it is impossible to grow any plant successfully in a pot if the drainage is bad or slovenly done.

Supposing this is done, fill the pot with the prepared compost up to two inches from the

top, put a pinch of sand in the centre, then press the bulb gently into it, just leaving its point out. Water them with a fine-rosed pot, then when they have drained place a small inverted flower-pot over each bulb. Stand them outside, covering the pots at least three inches deep with coal ashes or sand, protecting them from heavy rains or severe frosts. In six or eight weeks the pots will be full of roots. They may then be shifted to a cool house or frame, shading them from the sun until they gain their normal colour; for when they are taken from under the ashes you will find that their tops are yellow, and to expose them to strong light or to the sun at once would be suicidal. As they increase in size, weak manure water should be given to them three times a week.

ROMAN HYACINTHS.

These early single white hyacinths are almost indispensable where flowers in quantity at the dullest time of the year are required. They can be easily had in bloom from October to Christmas, then the single white and double rose (Italian varieties) will keep up the supply of flowers until the earliest of the large varieties begin to bloom.

THE GRAPE HYACINTH.

These little plants are gems of the first water. It puzzles me completely how or why it is that



Hyacinth.—“Alba Maxima.”



Bedding Hyacinths.

they are not more frequently grown; for they are very hardy, will live and bloom in the same position for years, last for a long time in a cut state, mix well with other flowers, and are withal so unique that the most careless eye is arrested and held entranced by their peculiar form and beauty. If this is not enough, they will grow and thrive where it would be hopeless to expect the ordinary hyacinth to get a decent living.

The azure hyacinth (*Hyacinthus Azureus*) flowers very early here, for in December it has thrown up its delightful little spikes of bloom although growing on the top of a cliff, the most exposed place in the gardens, only a few yards beyond the waves of the German Ocean. Grown in pots is the way I best like this beauty; its form and style seem peculiarly adapted for this kind of work. Really, I do not know what to say about its cultivation, for the little dear is not particular. Just treat them the same as you would an ordinary hyacinth, but, of course, not planting them so deep in the soil, for, as I have said before, the depth of planting of all bulbs should be regulated by their size.

Hyacinth bulbs can now be bought very cheap. At the same time there are thousands of people that cannot afford to buy fresh bulbs every year. They buy some to bloom in their small greenhouses each year, thinking that the next year the plants will bloom outside. The bulbs do, but have such miserable spikes of bloom as would make any

respectable hyacinth blush to see them. To get these bulbs to bloom outside the next season after they have been grown in pots, is not such a difficult matter if you treat your plants in a reasonable manner. Amateurs, as a rule, follow and adopt the treatment practised by gardeners; this is quite right in some cases, but in many others altogether wrong. You see it is this way. Amateurs have to look to ways and means, whereas gardeners have only to look at results, for, as a rule, their employers do not count the cost if the plants, flowers, or fruit grown give satisfaction.

Now, what is the usual practice with gardeners? As soon as the hyacinth blooms begin to look faded they are taken out of the greenhouse, the pots being laid on their sides under a wall outside. If they are any use another year, so well so good; if not, others are bought. Nor can you blame the gardener, for he has quite enough anxiety to keep up a supply of fruit, flowers, and vegetables without trying as well to be a nurseryman, florist, and bulb-grower. What is to be done, then? Why, you must treat your pot hyacinth the same as we do *amaryllis*—viz., as soon as the flower has faded cut it off, then feed your plant with weak liquid manure, giving it every attention, so that its leaves will be robust and strong until they have done their work. You will know when this takes place, because they will begin to turn yellow. Give it at this stage less and less water until the bulb goes naturally to rest. Do not forget that

with all bulbous plants it is their leaves that recuperate and enable the bulb to bloom another year. Do you not see how it is? It is as plain as a pikestaff. When the hyacinth is in bloom it takes the leaves all their time to attend to the wants of the flower; if you do not believe it, pull all the leaves off one of these plants and do not let one appear, then see what kind of a spike of bloom you will have. Now, you see the work the leaves have to do when the flowers have disappeared. They must repair the wear and tear that has taken place in the bulb; or where will your flowers be the next year?

Hyacinths grown in beds should have their blooms cut off as soon as their beauty is past, and then be watered with weak manure water, and allowed to remain in the beds as long as possible; for if you take them up and lay them into fresh soil before they die down naturally, failure the next year is certain.

I have read that excellent journal, the *Garden*, for more years than I care to remember, and I am not ashamed to say that many a hint have I taken from it. This receipt for hyacinth-growers appeared in the *Garden* for September 25, 1880. "W. E. G." was the writer, and he said that the dressing used had prevented the bulbs of hyacinths deteriorating for twelve years. The prescription is as follows: One and a half ounces superphosphate of lime, half ounce nitrate of potash (salts of nitre), half ounce crystallised carbonate of soda,

all well pulverised in a mortar, mixed together, and used at time of planting the bulbs. The above quantity is enough for a square yard of ground, and the cost is threepence. I should have said that at the end of the twelve years the bulbs, not being sufficiently protected, were killed by a very severe frost.

Where it is possible to do so, a few hyacinths should be grown in grass. Their chaste colours seem even more beautiful than when they are grown in pots. I suppose it is because of their setting of living green. These flowers, also, do not look so formal as they do when planted in beds, nor do they get splashed with dirt during heavy showers of rain. When grown in this way the turf should be taken off thinly, the soil taken out from underneath and filled with some rich soil. Then plant the hyacinths in the usual manner, replace the turf, and put in a stake to mark their position.

From hyacinths in grass to hyacinths in woods seems to me to be a natural transition. People who have never seen a wood carpeted with wild hyacinths would be surprised at such a treat. I consider that the most gorgeous exhibition of cultivated hyacinths cannot appeal to the heart or the eye in the same manner as do these wild denizens of our woods. Why, to see half an acre at once growing up amongst tangled grass, and in all sorts of positions, where it would be almost hopeless for the hand of man to get them to

grow, with their graceful arched heads bowing to every breath of air, makes such a picture as only the Creator can obtain.



White Roman Hyacinths.

Besides the common blue variety, other colours can now be bought of any London nurseryman, such as pure white, rose, and red. These are

the plants to grow even though your garden be ever so small, for they will never disappoint you. The clerk of the weather may do his utmost to ruin them, but they will only laugh at his feeble attempts; for so surely as rates and taxes come round, even more surely



Grape Hyacinth—*Muscari Botryoides*.

will they delight you every year with an ever-increasing posey of beautiful flowers.

The following list of varieties are good kinds that will force well:

SINGLE RED VARIETIES.

Cardinal Wiseman.
Cavaignac.

Charles Dickens.
Duchess of Albany.

SINGLE RED VARIETIES (*continued*).

| | |
|--------------------|-----------------------|
| Etna. | Mrs. Beecher Stowe. |
| Fabiola. | Pink Perfection. |
| Garibaldi. | Prince Albert Victor. |
| General Pelissier. | Queen of Hyacinths. |
| King of the Reds. | Ruby Queen. |
| La Superbe. | Solfaterre. |
| Lord Percy. | Von Schiller. |
| Macaulay. | Vuurbaak. |
| Moreno. | |

DOUBLE RED HYACINTHS.

| | |
|----------------------|---------------------------|
| Lord Wellington. | Regina Victoria. |
| Princess Louise. | The First. |
| The following Double | Reds must not be forced : |
| Bouquet Royal. | Perruque Royal. |
| Chancellor. | Prince of Orange. |
| Empress of India. | Sans Souci. |
| Lord Beaconsfield. | Susanna Maria. |
| Noble Par Mérite. | Venus de Medicus. |
| Panorama. | |

SINGLE WHITE.

| | |
|-----------------------|--------------------|
| Alba Maxima. | Lady Clinton. |
| Avalanche. | L'Innocence. |
| Baroness Van Tuyll. | Miss Nightingale. |
| British Queen. | Mont Blanc. |
| Duke of Clarence. | Mr. Plimsoll. |
| Grandeur à Merveille. | Princess Amelia. |
| Isabella. | Princess of Wales. |
| King of the Whites. | Queen of Whites. |
| La Française. | Royal Bride. |
| La Grandesse. | White Perfection. |

DOUBLE WHITE HYACINTHS.

| | |
|---------------------|---------------------|
| Edison. | Prince of Waterloo. |
| La Tour d'Auvergne. | Princess Louise. |
| Lord Derby. | |

The following must not be forced :

| | |
|-----------------------|-------------------|
| Anna Maria. | L'Adorable. |
| Bouquet Royal. | Madame de Stael. |
| Florence Nightingale. | Sceptre d'Or. |
| La Grande Duchesse. | Triumph Blandina. |
| La Virginité. | Virgo. |

SINGLE BLUE HYACINTHS.

| | |
|-------------------|---------------------|
| Baron Van Tuyll. | Haydn. |
| Blondin. | King of the Blues. |
| Captain Boyton. | King Cole. |
| Charles Dickens. | Lord Balfour. |
| Czar Peter. | Lord Byron. |
| Duke of York. | Lord Derby. |
| Electra. | Magnificent. |
| General Gordon. | Marie. |
| General Havelock. | Masterpiece. |
| Grand Lilas. | Prince of Wales. |
| Grande Vedette. | Queen of the Blues. |
| Harlequin. | |

DOUBLE BLUE HYACINTHS.

| | |
|-------------------------|-----------------|
| Blocksberg. | Garrick. |
| Charles Dickens. | Louis Philippe. |
| Crown Prince of Sweden. | Van Speyk. |

Not to be forced :

| | |
|----------------------|--------------------|
| Comte de St. Priest. | Prince Albert. |
| Duke of Norfolk. | Purple Prince. |
| Laurens Koster. | Richard Steele. |
| Lord Raglan. | Sir Joseph Paxton. |
| Perfection. | Thomas Moore. |

SINGLE YELLOW HYACINTHS.

| | |
|-------------------|----------------------|
| Adeline Ristorie. | King of the Yellows. |
| Bird of Paradise. | L'Or d'Australie. |
| City of Haarlem. | Obélisque. |
| Duc de Malakoff. | Primrose Perfection. |
| Ida. | |

CARNATIONS AND PICOTEES.

BY W. F. SANDERS.

In presuming to introduce a paper on Carnations and Picotees to the members of the Mansfield Horticultural Society, I am well aware that the majority of those present know from practical experience far more about this delightful subject than it lays in my power to communicate. I disclaim any special knowledge or proficiency in the culture or treatment of carnations, save that smattering which is ever the reward of those who endeavour to take an intelligent interest in the works of Nature.

My own experience, then, being limited to a few recent years, although my admiration dates back very much longer, I am indebted to the extremely interesting works by the late Mr. E. S. Dodwell, Mr. Weguelin, and Mr. Robert Sydenham for several passages I have introduced, more particularly on production, culture, classification, etc.

The carnation is the true gilly flower, and one of the oldest of all flowers. Under the word "Carnation" in "Haydn's Dictionary of Dates," it is stated the flower was introduced from the Continent into this country in the year 1567.

But there is abundant evidence that it is really of much greater antiquity than this would lead us to suppose; for an old book published, I believe, previous to this devotes a chapter to carnations, giving therein a list of nineteen varieties, bearing, amongst others, such quaint names as the Gray Hulo, the Stript Sandage, the Great Lombard, the Crystall, and the Camber-sign. There is even a possible reference to carnations by Pliny, who describes a similar, if not the same, flower as being used by the Spaniards to give a spicy flavour to their wines.

The history, however, of the flower under its present name dates at least three or four hundred years ago, and it appears evident that the South of Europe gave us the start in high-class carnation culture.

Shakespeare in his "Winter's Tale," written in 1610, makes Perdita say:

"Sir, the year growing ancient—
Not yet on summer's death, nor on the birth
Of trembling winter—the fairest flowers o' the season
Are our carnations."

In the year 1676, Jno. Rea had 360 sorts of carnations, and from this time the popularity of the flower never appears to have waned in any serious degree.

The modern history of the flower may be said to date from July, 1850, when the first proper exhibition took place in the Royal Nurseries at Slough, and the National Carnation and Picotee

Society was formally founded. The late Mr. E. S. Dodwell was an exhibitor, and he has done much since that date to bring to perfection this charming flower, and probably stands unrivalled as the raiser of a vast variety of yellow ground picotees and carnations. It is interesting to note that in almost the last paragraph of his latest published work he speaks as follows of the flower he delighted in and exhibited from 1850 down to his death in 1895, a period of forty-five years. He says: "They were the marvel of my childhood and the admiration of my youth; in maturer age they lent a charm to many a rugged pathway on the journey of life; in declining years they have been my familiar companions, and I shall continue to cherish them until my dying day. Age cannot wither nor custom stale their infinite variety."

I notice that almost all the authorities classify them similarly—viz., *Bizarres*—having two colours disposed longitudinally on a white ground; these are usually sub-divided into scarlet, crimson, pink, and purple. *Flakes*—having one colour only laid lengthwise on a white ground, consisting of purple, scarlet, and rose. *Picotees*—having the colour placed upon the edge, and being divided as red, purple, rose, and scarlet, which may again be sub-divided into heavy, medium, and light-edged. Then there are *Self*—svarieties of any one single colour; *Fancies*—embracing all flowers with markings on coloured grounds; and

the charming section known as *Yellow Grounds*—the flowers having either picoteed edges or flaked, or mixed with other colours. There are also the *Tree Carnations*, the grass of which grows up the stem, and which are eminently suited for conservatory culture; and the very fashionable variety called *Malmaisons*. These are exceedingly interesting, and till recently have been confined to the blush variety as regards colour, but may now be seen in white, scarlet, pink, crimson, and, I believe, in heliotrope. I cannot find that at present a pure yellow in this variety has been discovered. These are larger in the bloom—a tendency to split in the calyx—a broader leaf, and they are admirably adapted for spring and early summer blooming; whilst flourishing in some situations out of doors, they are essentially a plant for growing under glass.

The gradual process of evolution from the original gilly flower or even from the ordinary pink to the present marvellous selection of carnations and picotees presents another evidence of man's unremitting attention and patience. It may be interesting to some present if I mention that the committee of the Midland Carnation Society, with a view to place the names of those varieties which in their opinion held a premier place in their respective classes on record, to assist amateurs and others in the somewhat difficult task of selection, took a ballot with the following result. I give only the names of the

two first varieties, which received the greatest number of votes : *Scarlet Bizarres*—Robert Houlgrave and Admiral Curzon. *Crimson Bizarres*—Master Fred and J. D. Hextall. *Pink and Purple Bizarres*—Wm. Skirving and Sarah Payne. *Scarlet Flake*—Sportsman and Miss C. Graham. Let me remark here that Sportsman, so well known to many of you, was raised in 1855 by a Nottinghamshire gentleman—Mr. J. S. Hedderley, of Bulcote. I read that it at once went to the head of its class, taking the whole of the prizes in this class at the National Carnation Society's exhibition in 1856; for forty years it has held its own, notwithstanding the efforts of the increasing number of growers and raisers. *Rose Flakes*—Thalia and Rob Roy. *Purple Flakes*—Jas. Douglas and Gordon Lewis.

In *Picotees*, we have in their respective markings Jno. Smith and Brunette, Thos. William and Mrs. Gordon, Muriel and Clara Penson, Little Phil and Mrs. Payne, Mrs. Sharpe and Favourite.

In *Yellow Ground Picotees*—a glorious class—Mrs. Robert Sydenham (raised by James Douglas) is admitted to be the finest yellow ground ever raised, with Countess of Jersey a good second. I note that the National Carnation Society, adopting the same system of election to determine the relative merits of varieties, also place Mrs. Robert Sydenham and Countess of Jersey at the top of the poll, each with seventeen votes.

In *Fancies*, Stadraith Bail is placed first, with

Cardinal Wolsey and Romulus close up. Stadraith Bail was exhibited, I believe, by Messrs. Proctor at our show in August, 1896; it is exceedingly distinctive in its marking and colour.

Then come the host of *Selfs*—a collection of charming and lovely tints, commanding with some people more admiration even than the various marked varieties.

Germania in yellows appears to hold its own, although some present will remember lovely blooms of Miss A. Campbell we saw in the Newstead gardens in the summer. In *white*—Mrs. Fred, Mrs. Eric Hambro, and Miss Ellen Terry stand high. Of Mrs. Eric Hambro, Mr. Jas. Douglas (the raiser) said, “He would rather be the raiser of this variety than Lord Mayor of London.” In *flesh colour*—Hebe and Gladys. In the deeper tints of *rose*, Ruby was held to be the premier bloom, with Rose Celestial and Rose Unique many votes behind. Haye’s *Scarlet* was adjudged to hold the first position in its colour, with King of Scarlets close up. The Pasha appears to have dethroned Mrs. Reynolds Hole in the *terra-cotta* section, and Uncle Tom, amongst the darkies, to be preferred to Uriah Pike. King of the *Purples* is favourably noticed, and Theodore and Garville Gem appear to be the best in the lavender or heliotrope class.

Passing over any details as to special virtues of any particular varieties of either tree carnations or malmaisons, of which I have had little

experience, my paper would be incomplete if I did not briefly run through some suggestions as to the treatment and propagation. This opens the door for considerable difference of opinion and criticism, as there are many equally successful carnation growers who attain the desired result by different methods.

Firm planting is said to be essential in growing carnations. Mr. Weguelin, in a very interesting paper, strongly advocates planting out in borders in the autumn in the very place where it is proposed to bloom them. "The border," he says, "having been previously well dug and manured with some very old manure, may be well dusted with lime, charcoal, and soot." Sea-sand is a valuable addition, he also considers. "The border may be rolled or trodden down as if you were going to sow onions. The plants being firmly pressed in their respective places, the less they are interfered with during the winter the better. A top dressing of loam, leaf mould, and sifted manure in the spring, and very little watering during the winter months. Frost and snow will not hurt them, but protection from rough wind is desirable." Other authorities advocate strongly the system of potting the layers when rooted either singly in two and a half inch pots or three plants in a four-inch pot, and keeping them in a cold-frame all the winter with plenty of light, and the frame open every day, except when very frosty.

Much, undoubtedly, depends upon climate. We cannot take the liberties or run such risks in the Midland Counties, not even in Mansfield, that Mr. Weguelin may venture upon in the sunny county of Devonshire. The selection of a south aspect for carnations is not recommended, excessive heat in summer forcing the blooms too rapidly, giving them a tendency to split their calyxes. An open situation is decidedly the best; some protection from the winds by shrubs and trees is helpful, providing they do not surround the carnation bed too closely. Mr. Dodwell said: "Highly stimulating manures must be avoided. Be careful in the application of manurial matter; where one plant has perished for want of sustenance, hundreds have been killed or worse, the seeds of incurable disease engendered by excess of stimulants."

Carnations may be propagated in three ways; by means of layers, by cuttings, and by seed. Of these means, the process called layering is by far the safest and best. July is an admirable month for this operation, which is very simple, and the result usually satisfactory. The layers will be rooted and may be taken away about the end of September. Raising from cuttings is not so popular, I imagine, as formerly, a tendency to damp off being annoying and discouraging. "Raising new varieties from seed," says one expert, "is a very interesting and fascinating pursuit, but it requires considerable experience

and care to produce flowers which would equal, much more excel, standard varieties." Another says, "Every florist worthy of the name either does or ought to aim at raising seedlings which are an improvement on older varieties; in this, indeed, lies the chief and true secret of delight in floriculture."

It appears to me that the desire to discover fresh gems in the floral world, inducing enthusiasts to purchase seed, has had the result of a considerable multiplication of names in the rapidly increasing lists of carnations; hence so many similar blooms bearing different names. Nevertheless, it has the delightful charm of speculation about it, and the possibility of a prize turning up, which the happy discoverer usually honours with the name of his lady-love or perhaps his favourite daughter.

The *pests* and *enemies* that beset carnations are chiefly rabbits, sparrows, wireworms, spot, and greenfly. From my own experience, I think the medal might be awarded to the *wireworm*, which is a perfect nuisance, particularly in fresh soil. Soot and lime are said to be useful in counter-acting the mischief and lessening its effects. Rabbits are exceedingly fond of carnations, and in winter will leave almost any vegetable or green food for them; whilst sparrows will peck off the leaves when food is scarce. Spot is a fungoid disease usually attacking plants under glass. One well-known grower says in all seriousness,

“Earwigs and caterpillars must be hunted for at night by the aid of a lantern.” Any member of the Mansfield Horticultural Society suffering from sleeplessness, please note.

In bringing my fragmentary and somewhat disjointed paper to a conclusion, I would submit that the history of the carnation has, along with its development, exhibited much unselfish and earnest effort. Enthusiasts, rapidly increasing in numbers and efficiency, have doubtless had to fight against prejudice and jealousy; have had to battle against adverse seasons which have brought death or debility to many glorious varieties; and although the successes of the last forty years undoubtedly outstrip the inevitable drawbacks and have provided encouragement for the future, there have no doubt been times of despair and periods of disappointment in this pursuit as well as in all others. The result, however, of the indefatigable labours of these lovers of flowers is the attainment to-day of such a pitch of perfection that those who have never visited a *bonâ fide* carnation show can scarcely dream of! There may be found the choicest blooms and plants, the pick of over one thousand varieties, ranging from the daintiest and most delicate of tints to others which are perfect blazes of colour—almost every combination and variety of stripe and marking. I say almost, for it yet remains for some member of this or some other society to immortalise himself by bringing out a *true blue* carnation.

Gentlemen, my pleasurable task is over. If I have inspired or increased on the part of anyone present this evening a greater love for the flower world, I am amply rewarded. As a *lover* of flowers, not as an expert in floriculture, I am here to-night. Give any remarks I have made the fullest and freest criticism. I cannot close without qualifying one quotation the bard of Avon made three hundred years ago: "The fairest flowers o' the season are our carnations." My own verdict would be in favour of awarding this prize to what will ever be the queen of our English garden, the ROSE. Much as I appreciate and admire the flowers forming the subject of this imperfect paper, the delight of gathering a bunch of tea-rose buds on a summer morning with the dew still upon them transcends any joy which even carnations, with their manifold charms, can bestow. My loyalty to the tea-rose never can be shaken!!

I give you a few verses of Longfellow's in conclusion :

Spake full well, in language quaint and olden,
One who dwelleth by the castled Rhine
When he called the flowers, so blue and golden,
Stars, that in earth's firmament do shine.

Wondrous truths, and manifold as wondrous,
God hath written in those stars above,
But not less in the bright flowers around us
Stands the revelation of his love.



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Bright and glorious is that revelation
Written all over this great world of ours,
Making evident our own creation
In these stars of earth—these golden flowers.

Gorgeous flowerets in the sunlight shining,
Blossoms flaunting in the eye of day;
Tremulous leaves, with soft and silver lining,
Buds that open only to decay.

Brilliant hopes all woven in gorgeous tissues,
Flaunting gaily in the golden light,
Large desires, with most uncertain issues,
Tender wishes, blossoming at night.

Everywhere about us they are glowing,
Some, like stars, to tell us spring is born,
Others, their blue eyes with tears o'erflowing,
Stand like Ruth amid the golden corn.

In all places, then, and in all seasons,
Flowers expand their light and soul-like wings,
Teaching us by most persuasive reasons
How akin they are to human things.

And with childlike, credulous affection
We behold their tender buds expand;
Emblems of our own great resurrection—
Emblems of the bright and better land.